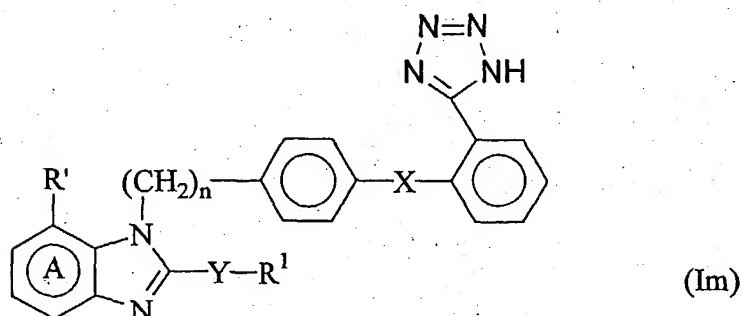
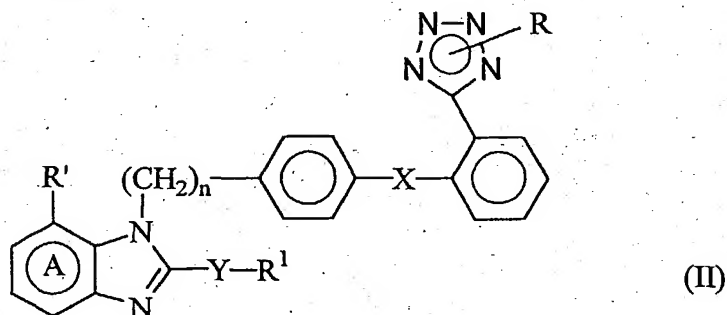


We claim:

1. A method for producing a compound represented by the formula:

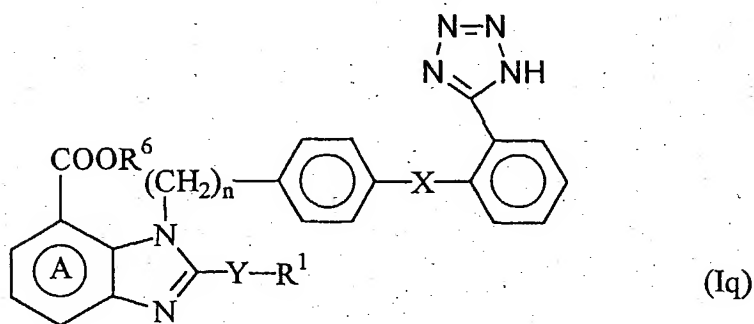


- 5 wherein the ring A is a benzene ring which may be substituted in addition to the R' group; R¹ is hydrogen or an optionally substituted hydrocarbon residue; X is a direct bond or a spacer having an atomic length or two or less between the phenylene group and the phenyl group; Y is -O-, -S(O)m- or -N(R⁴)- wherein m is an integer of 0, 1 or 2 and R⁴ is hydrogen or an optionally substituted alkyl group; R' is carboxyl, an ester thereof, an amide thereof or  
 10 a group capable of forming an anion or a group convertible thereinto; n is an integer of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises deprotecting a compound represented by the formula:

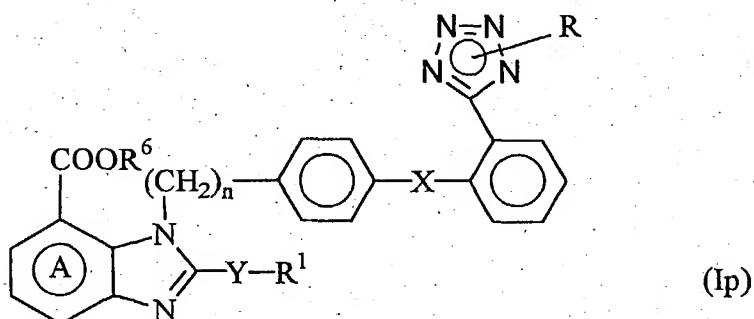


- 15 wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the other symbols have the same meanings as defined above; or a pharmaceutically acceptable salt thereof.

2. A method for producing a compound represented by the formula:

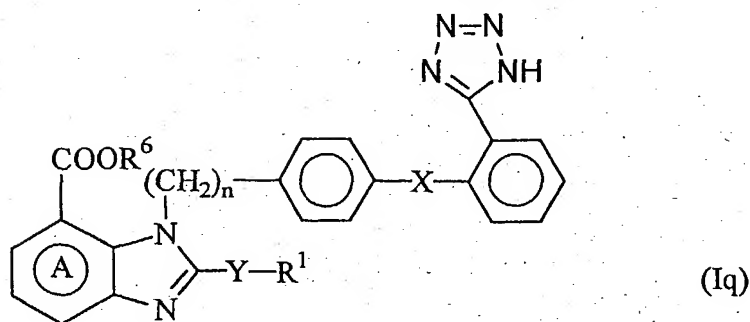


- wherein the ring A is a benzene ring which may be substituted in addition to the group of  
 5 -COOR<sup>6</sup> group; R<sup>1</sup> is hydrogen or an optionally substituted hydrocarbon residue; X is a direct  
 bond or a spacer having an atomic length or two or less between the phenylene group and the  
 phenyl group; Y is -O-, -S(O)<sub>m</sub>- or -N(R<sup>4</sup>)- wherein m is an integer of 0, 1 or 2 and R<sup>1</sup> is  
 hydrogen or an optionally substituted alkyl group; R<sup>6</sup> is a lower (C<sub>1-6</sub>) alkyl optionally  
 substituted with lower (C<sub>2-6</sub>) alkanoyloxy, 1-lower (C<sub>1-6</sub>) alkoxycarbonyloxy; n is an integer  
 10 of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises deprotecting a  
 compound represented by the formula:



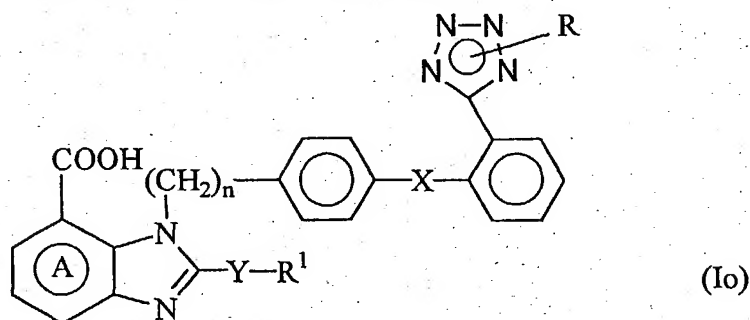
- 15 wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the  
 other symbols have the same meanings as defined above; or a pharmaceutically acceptable  
 salt thereof.

3. A method for producing a compound represented by the formula:

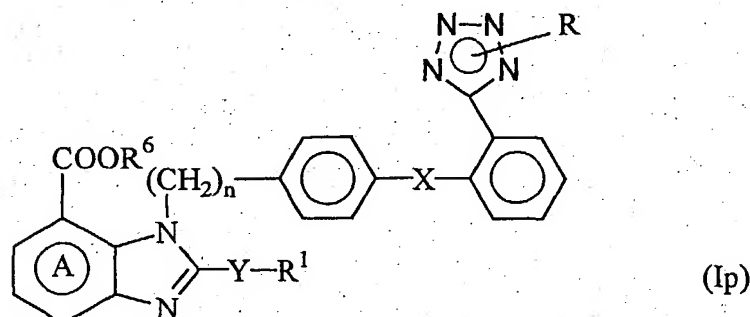


wherein the ring A is a benzene ring which may be substituted in addition to the group of  
 5 -COOR<sup>6</sup> group; R<sup>1</sup> is hydrogen or an optionally substituted hydrocarbon residue; X is a direct  
 bond or a spacer having an atomic length or two or less between the phenylene group and the  
 phenyl group; Y is -O-, -S(O)<sub>m</sub>- or -N(R<sup>4</sup>)- wherein m is an integer of 0, 1 or 2 and R<sup>4</sup> is  
 hydrogen or an optionally substituted alkyl group; R<sup>6</sup> is a lower (C<sub>1-6</sub>) alkyl optionally  
 substituted with lower (C<sub>2-6</sub>) alkanoyloxy, 1-lower (C<sub>1-6</sub>) alkoxy carbonyloxy; n is an integer  
 10 of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises;

- (i) reacting a compound represented by the formula:



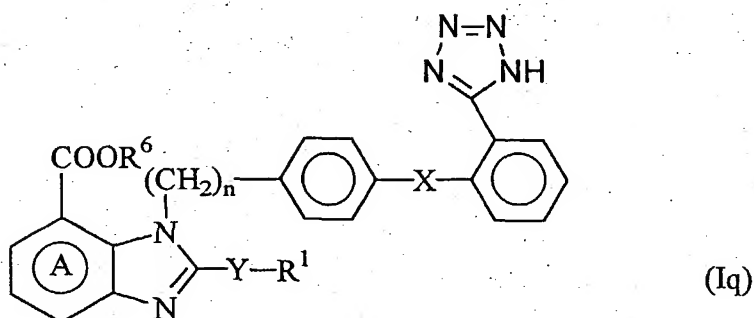
wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the  
 15 other symbols have the same meanings as defined above, or a pharmaceutically acceptable  
 salt thereof; with an alkylating agent to give a compound represented by the formula:



wherein each symbol has the same meaning as defined above; or a pharmaceutically acceptable salt thereof; and then,

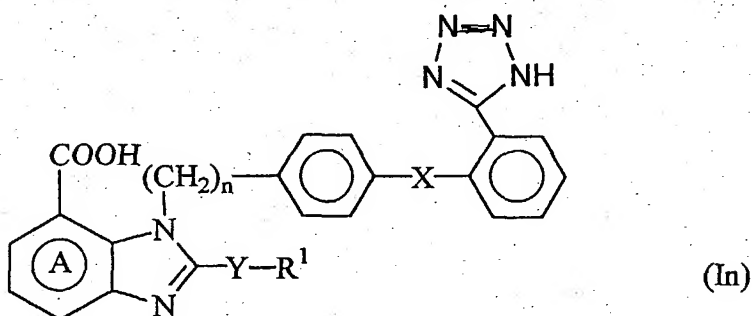
(ii) deprotecting the compound (Ip) or a pharmaceutically acceptable salt thereof.

5 4. A method for producing a compound represented by the formula:

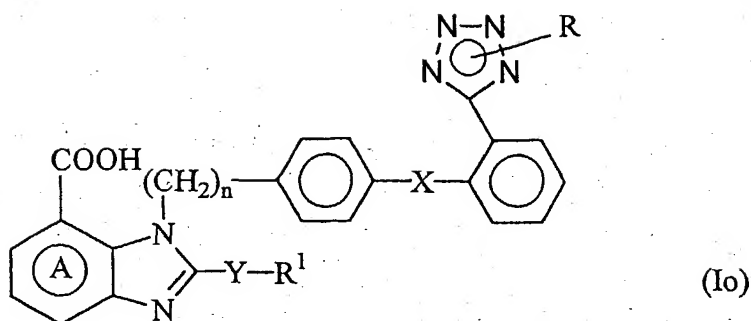


10 wherein the ring A is a benzene ring which may be substituted in addition to the group of -COOR<sup>6</sup> group; R<sup>1</sup> is hydrogen or an optionally substituted hydrocarbon residue; X is a direct bond or a spacer having an atomic length or two or less between the phenylene group and the phenyl group; Y is -O-, -S(O)m- or -N(R<sup>4</sup>)- wherein m is an integer of 0, 1 or 2 and R<sup>4</sup> is hydrogen or an optionally substituted alkyl group; R<sup>6</sup> is a lower (C<sub>1-6</sub>) alkyl optionally substituted with lower (C<sub>2-6</sub>) alkanoyloxy, 1-lower (C<sub>1-6</sub>) alkoxy carbonyloxy; n is an integer  
15 of 1 or 2; or a pharmaceutically acceptable salt thereof, which comprises;

(i) reacting a compound represented by the formula:

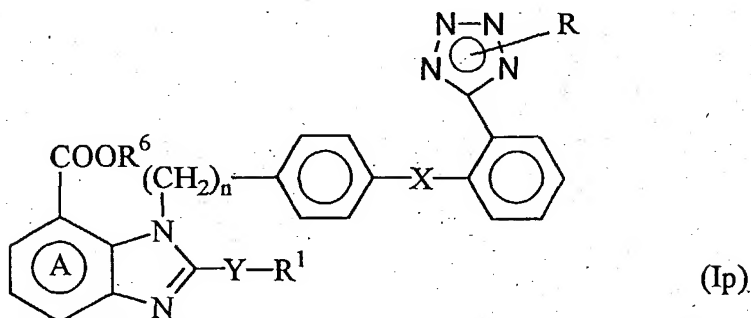


20 wherein each symbol has the same meaning as defined above, or a pharmaceutically acceptable salt thereof with an alkylating agent to give a compound represented by the formula:



wherein R is triphenylmethyl, 2-tetrahydropyranyl, methoxymethyl or ethoxy methyl, and the other symbols have the same meanings as defined above, or a pharmaceutically acceptable salt thereof;

(ii) reacting the compound (Io) or a pharmaceutically acceptable salt thereof with an alkylating agent to give a compound represented by the formula:



wherein each symbol has the same meaning as defined above; or a pharmaceutically acceptable salt thereof; and then,

(iii) deprotecting the compound (Ip) or a pharmaceutically acceptable salt thereof.

5. A method according to any one of claims 1 to 4, wherein R<sup>1</sup> is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl, or aralkyl group.

6. A method according to any one of claims 1 to 4, wherein R<sup>1</sup> is an alkyl, alkenyl, alkynyl, or cycloalkyl group, which may be substituted with hydroxyl, an optionally substituted amino group, halogen or a lower (C<sub>1-4</sub>) alkoxy group.

7. A method according to any one of claims 1 to 4, wherein R<sup>1</sup> is a lower (C<sub>1-5</sub>) alkyl or lower (C<sub>2-5</sub>) alkenyl group optionally substituted with hydroxyl, an amino group, halogen or a lower (C<sub>1-4</sub>) alkoxy group.

8. A method according to claim 6, wherein the alkyl is a lower alkyl group having 1 to about 8 carbon atoms, which may be straight or branched.

9. A method according to claim 8, wherein the lower alkyl group is unsubstituted or substituted with hydroxyl, an optionally substituted amino group, halogen or a lower (C<sub>1-4</sub>) alkoxy group.

10. A method according to any one of claims 1 to 4, wherein R<sup>1</sup> is a lower alkyl group having 1 to about 8 carbon atoms.

11. A method according to claim 5, wherein the aryl group is phenyl which may be substituted with halogen, nitro, lower (C<sub>1-4</sub>) alkoxy, or lower (C<sub>1-4</sub>) alkyl.

12. A method according to claim 5, wherein the aralkyl group is phenyl-lower (C<sub>1-4</sub>) alkyl which may be substituted with halogen, nitro, lower (C<sub>1-4</sub>) alkoxy, or lower (C<sub>1-4</sub>) alkyl.

13. A method according to claim 1, wherein R' is a group having the formula: -CO-D' wherein D' is hydroxyl, optionally substituted amino or optionally substituted alkoxy.

14. A method according to claim 1, wherein R' is a group having the formula: -CO-D' wherein D' is hydroxyl or optionally substituted alkoxy.

15. A method according to claim 14, wherein D' is hydroxyl, a lower (C<sub>1-4</sub>) alkoxy group optionally substituted with hydroxyl, optionally substituted amino, halogen, lower (C<sub>1-5</sub>) alkoxy, lower (C<sub>1-4</sub>) alkylthio or optionally substituted dioxolenyl on the alkyl moiety, or a group having the formula: -OCH(R<sup>7</sup>)OCOR<sup>8</sup> wherein R<sup>7</sup> is hydrogen, straight or branched lower alkyl having 1 to 6 carbon atoms, or cycloalkyl having 5 to 7 carbon atoms and R<sup>8</sup> is straight or branched lower alkyl having 1 to 6 carbon atoms, straight or branched lower alkenyl having 2 to about 8 carbon atoms, cycloalkyl having 5 to 7 carbon atoms, lower (C<sub>1-3</sub>) alkyl which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, lower (C<sub>2-3</sub>) alkenyl which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, optionally substituted aryl, straight or branched lower

alkoxy having 1 to 6 carbon atoms, straight or branched lower alkenyloxy having 2 to about 8 carbon atoms, cycloalkyloxy having 5 to 7 carbon atoms, lower (C<sub>1-3</sub>) alkoxy which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, lower (C<sub>2-3</sub>) alkenyloxy which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, or optionally substituted aryloxy.

16. A method according to claim 1, wherein R' is a group capable of forming an anion or convertible thereinto either chemically or under biological and/or physiological conditions.

17. A method according to claim 1, wherein R' is a group capable of forming the residue: -COO- or convertible thereinto.

18. A method according to claim 14, wherein D' is hydroxyl, a lower (C<sub>1-6</sub>) alkoxy group optionally substituted with hydroxyl, lower (C<sub>1-6</sub>) alkoxy or optionally substituted dioxolenyl on the alkyl moiety, a lower (C<sub>2-3</sub>) alkenyloxy optionally substituted with optionally substituted aryl on the alkenyl moiety, or a group having the formula: -OCH(R<sup>7</sup>)OCOR<sup>6</sup> wherein R<sup>7</sup> is hydrogen, or straight or branched lower alkyl having 1 to 6 carbon atoms and R<sup>6</sup> is straight or branched lower alkyl having 1 to 6 carbon atoms, cycloalkyl having 5 to 7 carbon atoms, lower (C<sub>1-3</sub>) alkyl which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, optionally substituted aryl, straight or branched lower alkoxy having 1 to 6 carbon atoms, cycloalkyloxy having 5 to 7 carbon atoms, lower (C<sub>1-3</sub>) alkoxy which is substituted with optionally substituted aryl or cycloalkyl having 5 to 7 carbon atoms, or optionally substituted aryloxy.

19. A method according to claim 1, wherein R' is carboxyl or a pharmaceutically acceptable salt or anion thereof.

20. A method according to claim 1, wherein R' is a group having the formula: -CO-OCH(R<sup>7</sup>)OCOR<sup>8</sup> wherein R<sup>7</sup> is hydrogen or straight or branched lower alkyl having 1 to 6 carbon atoms and R<sup>8</sup> is straight branched lower alkyl having 1 to 6 carbon atoms, cycloalkyl having 5 to 7 carbon atoms, optionally substituted phenyl, straight or branched lower alkoxy having 1 to 6 carbon atoms or cycloalkyloxy having 5 to 7 carbon atoms.

21. A method according to claim 1, wherein R' is a tetrazolyl group optionally protected with optionally substituted lower alkyl or acyl, trifluoromethanesulfonic amide, phosphoric acid or sulfonic acid.

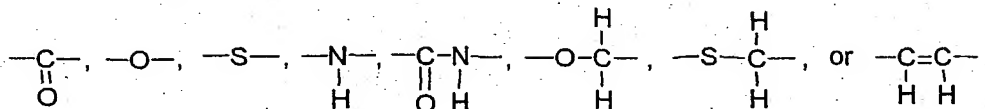
22. A method according to any one of claims 1 to 4, wherein the ring A is a benzene ring which may contain, in addition to the R' group, a substituent being selected from the group consisting of halogen nitro, cyano, optionally substituted amino, a group having the formula:  $-W-R^3$

wherein W is a chemical bond, -O-, -S-, or  $\begin{array}{c} -C- \\ || \\ O \end{array}$ ,

and R<sup>3</sup> is hydrogen or an optionally substituted lower alkyl group, a group having the formula:  $-(CH_2)_m-CO-D$  wherein D is hydrogen, hydroxyl, optionally substituted amino, or optionally substituted alkoxy, and p is 0 or 1, tetrazolyl optionally protected with an optionally substituted lower alkyl group or an acyl group, trifluoromethanesulfonic amide, phosphoric acid, or sulfonic acid.

23. A method according to any one of claims 1 to 4, wherein the ring A is a benzene ring which contains no substitution in addition to the R' group.

24. A method according to anyone of claims 1 to 4, wherein X is a chemical bond, lower (C<sub>1-4</sub>) alkylene,



25. A method according to any one of claims 1 to 4, wherein X is a chemical bond between the phenylene group and the phenyl group.

26. A method according to any one of claims 1 to 4, wherein Y is -O-, -SO<sub>m</sub>- wherein m is 0, 1, or 2, or -N(R<sup>4</sup>)- wherein R<sup>4</sup> is hydrogen or an optionally substituted lower (C<sub>1-4</sub>) alkyl group.



27. A method according to any one of claims 1 to 4, wherein  $Y-R^1$  is  $-N(R^4)-R^1$  wherein  $R^1$  and  $R^4$  are taken together with the N atom attached thereto to form a heterocyclic ring.

28. A method according to claim 1, wherein the deprotecting reaction is conducted in an aqueous alcohol containing about 0.5N to 2N hydrochloric acid or acetic acid.

29. A method according to claim 3 or 4, wherein the alkylating reaction is conducted in the presence of a base.

30. A method according to any one of claims 2 to 4, wherein the deprotecting reaction is conducted under acid condition.

31. A method according to claim 3 or 4, wherein the alkylating agent is halides.

32. A method according to claim 4, wherein the alkylating agent used in the reaction (i) of compound (In) with alkylating agent, is selected from triphenylmethyl chloride and methoxy methyl chloride.

33. A method according to claim 3 or 4, wherein the alkylating agent used in the reaction of compound (Io) with alkylating agent, is selected from cyclohexyl 1-iodoethyl carbonate, ethyl 1-iodoethyl carbonate, and pivaloyloxymethyl iodide.

34. A method for producing 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically acceptable salt thereof, which comprises deprotecting 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[[2'-(N-triphenylmethyltetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically acceptable salt thereof.

35. A method for producing 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically acceptable salt thereof, which comprises reacting 2-ethoxy-1-[[2'-(N-triphenylmethyltetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid or a

pharmaceutically acceptable salt thereof with an alkylating agent, and then subjecting the resulting compound to deprotecting reaction of the tetrazole group.

36. A method for producing 1-(cyclohexyloxycarbonyloxy)ethyl 2-ethoxy-1-[[2'-  
5 (1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylate or a pharmaceutically  
acceptable salt thereof, which comprises (i) reacting 2-ethoxy-[[2'-(1H-tetrazol-5-  
yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid or a pharmaceutically acceptable  
salt thereof with an alkylating agent to give 2-ethoxy-1-[[2'-N-triphenylmethyltetrazol-5-  
yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid or a pharmaceutically acceptable  
10 salt thereof, (ii) reacting the resulting compound with an alkylating agent, and then  
(iii) subjecting the resulting compound to deprotecting reaction of the tetrazole group.